



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/359,416	07/23/1999	YOUICHI YAMADA	P7156-9039	2778

4372 7590 09/16/2003

ARENT FOX KINTNER PLOTKIN & KAHN
1050 CONNECTICUT AVENUE, N.W.
SUITE 400
WASHINGTON, DC 20036

EXAMINER

MCCHESENEY, ELIZABETH A

ART UNIT	PAPER NUMBER
----------	--------------

2644

DATE MAILED: 09/16/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

7

Office Action Summary

Application No.

09/359,416

Applicant(s)

YAMADA ET AL.

Examiner

Elizabeth A McChesney

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. §133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1 and 2** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US Patent No. 5,060,272).

Regarding **claim 1**, Suzuki discloses an audio mixing console, which consists of a signal processing circuit 40 for processing audio signals (col. 3-lines 48-51, see figure 1). Suzuki further discloses setting parameters by the fader operators 1-8 and storing means wherein the memory 38, position information of the last operation of each fader operator (col. 3-lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suzuki by storing a series of operations or any parameters thereof wherein memory of a system is capable of storing any number of desired information in memory location. If a system is capable of storing a single past function it obviously is capable of storing more than one past function in the same manner and would be beneficial for enhancing the overall function and pattern of the device. Suzuki further discloses a control system 36 which causes the parameter assigned to the respective fader operators 1-8 with respect to the selected function to be displayed wherein when the function as been selected the last parameter with respect to the function and channel are read from the memory and the fader operators

Art Unit: 2644

react to the corresponding positions (col. 3-lines 37-43 and 52 -57) and therefore reads on the claimed limitations.

Regarding **claim 2**, Suzuki discloses everything claimed as applied above (see claim 1). Suzuki further discloses a first executing means wherein the last operation of each fader operator is store in memory 38. A second executing means wherein a function is selected and the last parameter is read from the memory and the faders respond accordingly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suzuki by storing a series of operations or any parameters thereof wherein memory of a system is capable of storing any number of desired information in memory location and then to execute the desired parameter by reading the corresponding memory location.

3. **Claims 3-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US Patent No. 5,060,272) in view of Silfvast et al. (US Patent No. 6,438,241).

Regarding **claim 3**, Suzuki discloses everything claimed as applied above (see claim 1). Suzuki discloses faders, which are capable of setting the parameters. Suzuki fails to specifically disclose the operating means as a rotational body. However, Silfvast et al. (hereinafter, "Silfvast") discloses a rotary control for an audio mixer or other audio processor, which sets parameters by the angular position of the rotational knob (col. 2-lines 27-30). Therefore it would have been obvious for one of ordinary skill to use a rotational knob as disclosed by Silfvast instead of Suzuki's fader to set parameters.

Art Unit: 2644

Both are well known in the art for adjusting levels and setting desired values and therefore could use either for parameter settings.

Regarding **claim 4**, Suzuki in view of Silfvast discloses everything claimed as applied above (see claim 3). Silfvast further discloses a display such as an array of lights wherein a sensor is coupled with the rotor, which senses its relative rotation wherein the display of lights is in response to the sensor to indicate a value of a parameter (col. 2-lines 40-56).

Regarding **claim 5**, Suzuki in view of Silfvast discloses everything claimed as applied above (see claim 4). It is inherently taught that the faster the knob is turned the quicker the sensor picks up the information in order to display the light referencing the position of the parameter. Therefore the rotating direction and the speed of the knob being turned (angular velocity) is inherently used to calculate the rotating amount and which the position setting is verified by the display.

Regarding **claim 6**, an audio mixing console is commonly used to mix various forms, styles and bits of audio for a desired sound in which faders, buttons, switches and rotary knobs are used. It would have been obvious to one of ordinary skill in the art to produce sounds such as, for example a jet or a bell. It is also well known in the art that a mixing console is capable of controlling, mixing and designing audio sounds of all ranges and therefore commonly allows the user to adjust the pitch or frequency of a sound to produce a desired output of audio.

Response to Arguments

Art Unit: 2644

4. If a system is capable of storing a single past function it obviously is capable of storing more than one past function in the same manner and would be beneficial for enhancing the overall function and pattern of the device. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suzuki by storing a series of operations or any parameters thereof wherein memory of a system is capable of storing any number of desired information in memory location and then to execute the desired parameter by reading the corresponding memory location.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2644

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. McChesney whose telephone number is (703) 308-4563. The examiner can normally be reached Monday – Friday, 8:00 am – 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

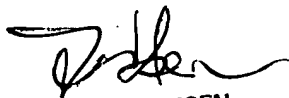
Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

EAM *EAM*
September 5, 2003


FORESTER W. ISEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600